

http://ijecm.co.uk/

# EFFECT OF NATIONAL DEVELOPMENT FINANCING ON THE EFFICIENCY OF MANUFACTURING FIRMS IN NIGERIA: AN EMPIRICAL REVIEW

Tabitha Nasieku

Department of Economics, Accounting & Finance, Jomo Kenyatta University of Agriculture and Technology, Kenya

# Oyedeji Olukayode 🔤

Department of Economics, Accounting & Finance, Jomo Kenyatta University of Agriculture and Technology, Kenya simplekay2013@yahoo.com

# Abstract

The Gross Domestic Product in Nigeria has risen gradually over time however, the contribution from the manufacturing sector showed a decrease. This paper thus, reviews empirical literature to analyse the effect of national development financing on the efficiency of manufacturing firms. Average manufacturing capacity utilization was used to denote the efficiency of manufacturing firms while financing through credits given by various DFI's were used to denote national development financing. Evidences showed that, the finance of different development channels are individually and separately significant in improving the growth of manufacturing firms. The national development financing of different channels of financing has significant positive effect on efficiency of manufacturing firms. The study concluded that national development financing of different channels of efficiency of manufacturing firms through investment in infrastructural development, promotion of exports, enhancing growth of MSME's in manufacturing, and provision of credit for establishment and expansion of viable manufacturing entities in Nigeria.

Keywords: Gross Domestic Product, Manufacturing Firms, National Development Financing, Efficiency, Manufacturing Capacity Utilization



#### INTRODUCTION

The importance of manufacturing sector performance to economies of the world has been subject of debate by policy makers as well as researchers for several years and this is because the success of any economy in the world is believed to depend on its ability to manufacture most of what it consumes and even export these manufactured commodities to some other countries of the world that might need them. A firm's manufacturing efficiency is the point at which it has reached its maximum production capacity and this can be measured with indicators such as rate of manufacturing capacity utilization, level of manufacturing schedule attainment, inventory turnover control and percentage of defective products in manufacturing batches. The rate of manufacturing capacity utilization as a measure of efficiency of manufacturing firms in any economy is very important among other indicators of manufacturing efficiency measures because it provides information on an economy's general state of production, the level of economic activity, and the amount of production expansion that may be achieved given a stock of capital or resources (Omenvi, 2017).

According to Omenyi (2017), every economy aspires to achieve better growth rates while maintaining macroeconomic stability, as assessed by key indicators including real interest rates, exchange rates, inflation rates, and, most significantly, manufacturing capacity utilization rates. Manufacturing capacity utilization rate describes the relationship between the actual output and the maximum possible output (Satik, 2017). The higher the manufacturing capacity utilization rate in an economy, the more efficient the manufacturing firms in such an economy and vice versa. According to Simon-Oke and Awoyemi (2010), the manufacturing industry is a leading sector in advanced economies in many ways. However, the same cannot be said of African countries as most African countries are grappling with how to improve their manufacturing sector performance, and in order to do so, a focus has been placed on the role of infrastructural development along with capacity utilization in the manufacturing sector.

The level of robustness of the development financing in an economy is a factor that may drive how well the potential capacity of manufacturing in an economy is being utilized. In assessing the potential of the manufacturing sector in Africa, apart from human capital, infrastructural development, financing has a significant impact on the manufacturing sector's performance, according to Signe (2018) and Edeme, Buzugbe, Nkalu, and Arazu (2020). Since efficiency of manufacturing firms is generally seen as a ladder to a sustainable economic growth and development in any economy of the world, sustainable national development financing is a catalyst to achieving the required efficiency for the sustainable growth and development. A nation's attempts to promote, stimulate, and catalyze expansion through public and private investment in physical development, redevelopment, business and industry are known as



development financing. According to the World Bank (2019), the ultimate goal of boosting Africa's manufacturing sector's growth and performance may be a mirage if public infrastructure is not improved and capacity is not efficiently leveraged.

In the case of Nigeria which is the largest economy in Africa with Gross Domestic Product (GDP) of USD 446.543 billion as at 2020, the importance of the manufacturing sector has long been recognized, with numerous theoretical and empirical considerations arguing for the need for a growing manufacturing sector to stimulate economic growth and development. Despite the recognition of the importance of manufacturing as a ladder to sustainable economic growth and development in Nigeria among other developing nations, the records show that its inherent potential has not been sufficiently utilized for the development of the economy. The Nigerian manufacturing industry has had a poor performance over the years (Central Bank of Nigeria (CBN) and National Bureau of Statistics (NBS) statistical bulletins of various issues). While Nigeria's total real Gross Domestic Product (GDP) has risen gradually over time, the manufacturing sector component has fallen progressively on average from 11.8 % in 1982 to 7.4 % in 1997, and has remained stable at around 6 % from 1998 to 2010. It subsequently increased slightly to 10% in 2011 before dropping to 9.5% in 2015. From 2016 to 2019, the value averaged 8.7%. This pattern can also be seen in the manufacturing sector's average capacity utilization rate, which decreased steadily from 63.6 % in 1982 to 30.4 % in 1997 before increasing significantly to 54.9% and 56.5% in 2002 and 2003 respectively and then remaining stable within 53% and 58% between 2004 and 2013. It increased to 60.35% in 2014 and declined back to 52.7% and 48.5% in 2015 and 2016 respectively. Also, between 2017 and 2019, the average rate of utilization of manufacturing capacity was 55%. Heavy reliance on imported products amidst collapsed domestic production, crowding out of many manufacturing companies.

# **National Development Policy Framework in Nigeria**

As part of the efforts of Nigeria government to address the challenge of unimpressive manufacturing sector output which is tied to dwindling rate of utilization of its potential manufacturing capacity, a lot of steps have been taken by the government in the direction of setting out different National Development Plans over the years and channeling funds towards financing the National Development Plans. The policy framework for industrial development is examined from independence in 1960 to the present day. The First National Development Plan was scheduled for the Period of 1962 to 1968. It adopted import-substitution industrialization (ISI) as a systematic attempt at industrial growth, with the goal of mobilizing national economic resources and deploying them on a cost-benefit basis among competing projects. An oil



refinery, a development bank, and a mint and security company were among the significant industrial infrastructures built during this time period and were regarded critical for sparking Nigeria's economic take-off. Despite the fact that the ISI strategy's main goal was to encourage the start-up and growth of industries, it was marked by a high degree of technological reliance on foreign know-how to the point where the country's domestic factor endowments were grossly neglected. The Second National Development Plan (1970 to 1974) aimed to solve the ISI strategy's weaknesses by focusing on "upgrading local production of intermediate and capital items for export to other industries." This was the first systematic attempt to combine agriculture, transportation, mining, and quarrying into an industrial structure. However, due to Nigeria's limited technological capabilities, the economy was unable to progress past the initial stages of these projects.

At the height of the oil boom, the Third National Development Plan (1975 to 1980) was launched. Despite the country's lack of executive ability, the plan called for a 42 billion NGN investment (up from 3.2 billion NGN in the Second Plan). The emphasis remained on public sector investment in industry, particularly heavy industries. Despite the fact that the nation's oil sector had become dynamic and affluent during the same time period, and the economy's gates had been opened to all kinds of imports and real industrial growth was hampered as a result of this. The Fourth National Development Plan (1981 to 1985) coincided with the start of a worldwide economic recession, which resulted in decreased foreign exchange earnings, balance of payment disequilibrium, and unemployment. As a result, the heavily reliant on imports manufacturing sector has been seriously harmed. The global economic downturn exposed serious flaws in Nigeria's industrial structure and strategy. At the conclusion of Nigeria's Fourth Development Plan, it was clear that existing industrial growth techniques could not alleviate the problems of economic underdevelopment in Nigeria. As a result of this, not only technical and economic imperatives, but also social factors prompted the search for alternative development paradigms and this led to implementation of Structural Adjustment Program (SAP) as an alternative framework for resolving the flaws and inefficiency of prior development planning initiatives. The trade and financial liberalization programme was implemented in 1989. One of the main goals was to promote efficiency by stimulating rivalry among domestic enterprises and between local import-competing firms and foreign firms. In the same year, the National Economic Reconstruction Fund (NERFUND) was established as a complement to industrial policy. The industrial strategy's goal was to reverse several elements of Nigeria's indigenization policy and open up the economy to foreign investors.



After the four phases of development plan, implementation of SAP and establishment of NERFUND, the government of Nigeria as part of its efforts targeted at providing finance towards achieving a sustainable economic growth and development by focusing on efficiency of manufacturing firms in Nigeria, established various development financial institutions while some were rebranded between 1991 and 2001. The establishment of various development financial institutions (DFI's) was to meet the current challenges of financial constraints being faced by entrepreneurs in the various sectors of the economy. In line with CBN development finance regulatory framework, the up to date development financial institutions in Nigeria are Bank of Industry of Nigeria (BOI) which was reconstructed in 2001 out of the Nigerian Industrial Development Bank (NIDB) Ltd, which was incorporated in 1964 to provide financial assistance for the establishment of large, medium and small projects as well as the expansion, diversification and modernization of existing enterprises; and rehabilitation of existing ones; Bank of Agriculture of Nigeria Ltd (BOA), which was initially incorporated as Nigerian Agricultural Bank (NAB) in 1972 and became operational in 1973 with the core mandate of providing credit to finance agricultural development in Nigeria; Nigeria Export-Import Bank (NEXIM), which was established in 1991 as an Export Credit Agency (ECA) and presently provides short and medium term loans to Nigerian exporters; The Infrastructure Bank of Nigeria Plc. (IB), which was established in 1992 as Urban Development Bank Ltd with the mandate to foster the rapid development of infrastructure across the country; The Development Bank of Nigeria (DBN) was conceived by the Federal Government of Nigeria (FGN) in collaboration with global development partners to address the major financing challenges facing Micro, Small and Medium Scale Enterprises (MSMEs) in Nigeria and Federal Mortgage Bank of Nigeria (FMBN), which was established in 1956 and known as Nigeria Building Society (NBS) as at then, and assumed the status of an apex mortgage institution in Nigeria with the promulgation of the FMBN Act 82 of 1993 and the Mortgage Institutions Act 53 of 1989. It also commenced the management and administration of the contributory savings scheme known as the National Housing Fund (NHF) established by Act 3 of 1992. The National Housing Fund (NHF) is a social savings scheme designed to mobilize long-term funds from Nigerian workers working with various sectors and the Federal Government to advance concessionary loans to contributors. These DFI's are in place to serve different purposes in the development financing structure of Nigeria economy. In this study, efficiency of manufacturing firms as denoted by average manufacturing capacity utilization is taken as the function of the amount of credits that have been advanced for years to various beneficiaries through different channels of national development financing of Nigeria DFI's already discussed above, in order to finance different development agenda earlier explained.



#### Statement of the Problem

According to Omenyi (2017), the average capacity utilization rate in advanced markets is 85 percent, which is guite high and implies that existing capacity is being used to its optimal potential. In addition, developing market (BRICS) countries achieved an average of 75%, indicating efficient utilization of installed capacity, but the large disparity between actual and potential output leaves ample possibility for production expansion. Finally, due to structural and financial constraints, the underdeveloped markets have an average of 53%. This demonstrates the underutilization of installed capacity and resource waste in certain countries' manufacturing processes. This is confirming the fact that the problem of inefficiency of manufacturing firms is more related to majority of the underdeveloped economies and most of them are concentrated in Africa as majority of African economies rely on primary products instead of manufactured products for their export. In the case of Nigeria, oil and gas sub sector, in particular, is a major economic driver, accounting for more than 95% of export revenues. The main problem of Nigeria economy is that it is a consuming economy rather than being a producing one and this is common of several economies of Africa continent. It is a setback that most of the economies of Africa are still being classified as part of the periphery (underdeveloped) of the international economy and this classification of these economies as part of the Third World has long been there without any significant improvement for the economies to join the league of Semi-Periphery (Developing) or even possibly the Core (Developed) economies of the international economy. This unfavourable classification of the most of the economies of Africa is supported by the same fact that they rely so much on imports for their consumptions than what they can produce themselves. The economic implication of this is that both their term of trade and the balance of payments are always unfavourable because their level of importation far dominates their exportation. This unhealthy situation is making their currencies to be far lower in value of exchange with United States Dollar which is the base currency for denomination of most international transactions. As a result of this, the economies in this category earn less foreign exchange than what can sufficiently fund the size of their economies. In developing and underdeveloped economies such as Nigeria, it has been perceived that the most binding constraint to firms' growth is access to capital to finance both economic and social infrastructure that will aid manufacturing firms' efficiency and also, due to weak financial systems, manufacturing firms' opportunities to expand output, buy modern equipment, and upgrade technology are limited. In the light of this, the objective of the study is to review some past empirical researches that are related to the effect of national development financing on the efficiency of manufacturing firms.



# LITERATURE REVIEW

This section reviews the theories that are linked to the problem of research and the related empirical studies that have previously been carried out. It also covers the critiques of the reviewed empirical literature and the research gap.

# **Theoretical Literature**

#### Theory of Modernization

Alvin So, Smelser, Coleman, and Rostow contributed to emergence of this theory. The following are the major assumptions of modernization theory of development: Modernization is a step-by-step procedure. We might claim that modernization promotes tendencies toward convergence among societies because it is a homogenizing process. Modernization is a process of Europeanization or Americanization; there is a complacent attitude toward Western Europe and the United States in the modernization literature. These countries are regarded as having unrivaled economic success and democratic stability. Modernization is a gradual process that is not only necessary but also desirable in the long run. Rostow, according to this presentation, has discovered a feasible solution for promoting Third World modernization. If the problem facing Third World countries is a lack of productive investments, the solution is to provide capital, technology, and expertise to these countries.

# Theory of Dependency

The Economic Commission for Latin America and the Caribbean's (ECLAC) studies in the 1950s laid the groundwork for dependency theory. Raul Prebisch was one of the most representative authors. The Prebisch model's main points are that in order to generate development circumstances inside a country, it is important to: i. Keep the monetary exchange rate under control, the government should focus more on fiscal policy rather than monetary policy; ii. Encourage the government to play a more effective role in national development; iii. Establish an investment platform in which national capitals are given priority; iv. Allow external money to enter based on priorities already set in national development plans; v. Develop national plans based on the import substitution paradigm, with quotas and tariffs on foreign markets to protect domestic manufacturing. At the start of the 1950s, dependence theory was founded on Prebisch and ECLAC's idea. However, some authors, such as Falleto and Dos Santos, contend that the ECLAC's development initiatives failed, and that the dependence model was only established after that.



# Theory of World Systems

The varied forms that capitalism was assuming over the world, especially during the 1960s, was a crucial ingredient from which the notion of world-systems evolved. These new circumstances resulted from the fact that international financial and commercial systems became more flexible, with national government acts having less and less influence. Essentially, these new international economic situations allowed a group of researchers led by Immanuel Wallerstein to come to the conclusion that there were new activities in the capitalist worldeconomy that could not be explained within the limitations of the dependency paradigm. The Fernand Braudel Center for the Study of Economics, Historical Systems, and Civilization at the State University of New York at Binghamton was the birthplace of this school. Wallerstein and his followers recognized that there are global conditions that act as determinants, particularly for small and developing countries, and that the nation-state level of analysis is no longer the only useful category for studying development conditions, especially in Third World countries. The new global communications systems, new world trade procedures, the international financial system, and the transfer of information and military links were the variables that had the biggest impact on small countries' internal development.

# **Empirical Literature**

In order to analyse the effect of national development financing on efficiency of manufacturing firms in Nigeria, this aspect of literature review looked at the related empirical studies so as to arrive at the findings and the conclusion of the study.

Itaman and Awopegba (2019) examined "The Role of Finance in Nigeria's De-Industrialization". The objective of the study was to investigate the role of finance as a potential causal factor for Nigeria premature de-industrialization. The study used secondary data pooled from Central Bank of Nigeria statistical bulletin, World Bank Development Indicators and National Bureau of Statistics bulletin for the period 1981 to 2017. Auto Regressive Distributed Lag (ARDL) was used to analyse the short and long run relationship between premature deindustrialization and finance. The study found that an increase in bank credit has a significant impact on premature industrialization in Nigeria. The study then concluded that development banks in Nigeria serve to correct the negative effect of commercial banks' lending by directing credit to manufacturing. Itoya (2020) examined "The Role of Financial Sector in Enhancing Performance in the Manufacturing Sector in Nigeria". The objective of the study was to investigate the effect of financial sector development on manufacturing sector performance in Nigeria, using firm's manufacturing capacity utilization to denote manufacturing sector's performance. The study used secondary data obtained from Central Bank of Nigeria (CBN)



statistical bulletin and World Bank Development Indicators for the period of 1985 to 2017. Regression Model was employed with the use of Co-integration and Error Correlation Model in the empirical analysis of the study. It was found that money supply, credit to private sector, and exchange rate have a positive and significant effect on manufacturing capacity utilization while interest rate and inflation rate which though are significant have negative effect on manufacturing capacity utilization and output. The study then concluded that a well-structured and improved financial system will enhance the capacity utilization for the realization of improved output level in the manufacturing sector. Okere, Okere and Nwaneto (2020) examined "Effects of Bank Credits on the Manufacturing Sector Output in Nigeria (1981to 2018). The objective of the study was to investigate the effects of bank credits on the manufacturing sector output in Nigeria from 1981 to 2018. The study used secondary data sourced from Central Bank of Nigeria (CBN) statistical bulletin and employed Regression Model with the use of Auto-Regressive Distributed Lag (ARDL) bound co-integration test approach and Error Correction Model for the empirical analysis. The study found that the variables of interest put in the model are bound together in the long-run and error correction term displayed a negative and statistically significant result. It was revealed that bank credits exhibited an optimistic and significant relationship with the manufacturing sector in Nigeria. The study therefore recommended that government should seriously pursue those policies geared towards deepening the financial sector and enhancing the soundness of banks. Guadagno (2016) examined "The Role of Industrial Development Banking in Spurring Structural Change". The objective of the study was to investigate the role of development banks as engines of structural change, in particular in spurring the growth of manufacturing firms. The study used secondary data of eight development banks across the world which are drawn from high, middle and low income economies. Overview of the banks' history, their institutional settings, the evidence on the size of their loan portfolios, the average maturity of their loans and the basic conditions attached to their credit lines were presented for analysis. It was found that development banks fill a gap in domestic financial systems by offering loans with longer maturities and facilitating access to loans through lower interest rates. The study concluded that the institutional setting of development banks is therefore a crucial link between the bank and the government of any nation and can maximize policy complementary and coherence, thus intensifying the impact of industrial policies.

Ogunlana, Yaqub and Alhassan (2016) examined "Infrastructure Finance and Development in Nigeria". The objective of the study was to analyse the effect of public and private investment in infrastructures on economic growth in Nigeria. The secondary data used in this study were obtained from the CBN statistical bulletin of various issues, Annual Reports and



Statement of Accounts, World Health Organization Global Health Expenditure database and World Development Indicators (WDI) for the period of 1970 to 2014. The study employed Regression Model with the use of Engel Granger Co-integration and Error Correction Model to ascertain the long run relationship and establish the values of long run parameters. The findings show that the infrastructure components exert positive contributions on economic growth in Nigeria. The study concluded that infrastructure can raise the level of economic growth necessary to promote development in Nigeria if necessary policies are implemented. Lawrence (2020) examined "Effect of Government Infrastructure Development Expenditure on Performance of Manufacturing in Kenya". The objective of the study was to analyse the effect of Government infrastructure expenditure on manufacturing in Kenya. The study used secondary data collected from the World Development Indicators, Kenya National Bureau of Statistics, Central Bank of Kenya databases, economic surveys and national financial budget reports, for the period of 1990 to 2017. Ordinary Least Square method of Regression Model was used to estimate the parameters in its linear equation. The study found that the coefficient of transport infrastructure was positive, energy infrastructure was negative and that of information & communication infrastructure was positive and statistically significant. The study recommended that government should allocate more funds to the development of transport and information & communication infrastructures in order to realize a significant contribution of manufacturing in the share of GDP in Kenya. Shobande and Etukomeni (2016) examined "Infrastructural Investment and Industrial Growth: A Private Investment Led Approach". The objective of the study was to investigate the impact of infrastructural investment on industrial growth in Nigeria. The study used annual secondary time series data sourced from the Central Bank of Nigeria's (CBN) statistical bulletin between 1960 and 2015. The study employed Regression Model with the use of Auto Regressive Distributed Lag bound testing approach in estimating the relevant relationships among variables of study. The result of long run estimates indicates that the variables are mutually co-integrated suggesting that long run relationship exists. The study concluded that infrastructural investment in the industrial sector is a necessary but not sufficient condition for economic recovery if structural transformation does not consider the inter-link among other important sectors of the economy that would facilitate growth recovery and speed up the rate of industrialization in Nigeria. Obianuju and Isiaka (2019) examined "Infrastructure and Manufacturing Value Added in Sub-Sahara Africa Countries". The objective of the study was to investigate the nexus between infrastructure and manufacturing value added (MVA) in Sub-Sahara Africa (SSA). The study used panel secondary data for 34 Sub-Sahara Africa countries spanning 2003 to 2018. The tool of analysis was Panel Data Regression Model. The results of the empirical analysis obtained from the static and dynamic panel estimation



techniques applied suggest that infrastructure is essential for the improvement of manufacturing value added in SSA. The study therefore concluded that massive investment in infrastructure is a viable policy option for enhancing the growth and development of the manufacturing sector in SSA. Edeme, Buzugbe, Nkalu and Arazu (2020) examined the topic titled "Assessing the Impact of Infrastructural Development on Manufacturing Value Added and Employment in Africa Emerging Economies". The objective of the study was to investigate the impact of infrastructural development on manufacturing value added and employment in Africa emerging economies. The study used secondary data of eight Africa emerging economies from 1980 to 2018. Two different Panel Data Regression were employed where manufacturing value added was the dependent variable for the first one and manufacturing sector employment for the second one. It was found that coefficient of ICT is positive & statistically significant in influencing MVA & employment. FDI has positive relationship with both MVA & employment. Transport infrastructure has negative on MVA & employment. The study additionally found that the level of development has negative effect on MVA & employment. The study concluded that electricity & ICT infrastructure, along with other macroeconomic factors are important drivers of MVA & employment in Africa emerging economies (AEE8).

Nwosa and Oseni (2013) examined "The Impact of Banks Loan to SME's on Manufacturing Output in Nigeria". The objective of the study was to investigate the contribution of banks loan to SME's on manufacturing output in Nigeria, for the period spanning 1992 to 2010. The study used secondary data obtained from Central Bank of Nigeria (CBN) statistical bulletin and World Bank Database. Regression Model, using Error Correction Model (ECM) was adopted to obtain the relationship among the study variables. It was found that banks loans to SME's had insignificant impact on manufacturing output both in the long run and short run. The study therefore concluded that there is a need for greater deliberation and conscious effort by the government in ensuring that loans are given to the ultimate users. Mutua and Ngahu (2016) examined "Effect of Development Financing on the Growth of Micro, Small and Medium Enterprises Funded by Kenya Industrial Estates in Nakuru County, Kenya". The objective of the study was to determine the effect of development financing on the growth of MSME's funded by Kenya Industrial Estastes in Nakuru County. Primary data were adopted with structured questionnaires to collect data where study population constituted of 179 employees working with MSME's funded by Kenya Industrial Estates in Nakuru. Pearson Product Moment Correlation Coefficient and Multiple Regression were used to handle the relationship between the independent variables and the dependent variable. The study found that collateral requirements negatively influence growth of MSME's funded by Kenya Industrial Estates while the loan



repayment period positively influences the growth of MSME's. The study recommended that government should channel more funds to KIE to enable the corporation to finance more businesses and thereby enhance economic growth. Mai, Bui, Yuichiro, Tran and Mai (2019) examined "The Causal Effect of Access to Finance on Productivity of Small and Medium Enterprises in Vietnam". The objective of the study was to investigate the causal effects of access to finance on productivity of Small and Medium Enterprises (SME's) operating in the manufacturing sector in Vietnam. The study used secondary data source which is from the Vietnamese SMEs survey collected in 2013 and 2015. The study adopted Regression Model with the use of Difference-in-Difference (DID) approach as well as the Propensity Score Matching (PSM) to examine the causal inferences of access to finance on firms productivity. It was found that improving the financial accessibility could directly enhance firms' productivity. The study recommended that government should put more efforts into assisting SME's in generating bankable projects and create sound and healthy financial environment to stimulate firms' access to finance which will ensure their sustainability and growth.

Ebenyi, Nwanosike, Uzoechina and Ishiwu (2017) examined "The Impact of Trade Liberalization on Manufacturing Valued Added in Nigeria". The objective of the study was to investigate the impact of trade openness on the output of Nigerian Manufacturing Sector. The study used secondary data obtained from Central Bank of Nigeria statistical bulletin for the period of 1970 to 2014. The study employed Regression Model, with the use of Ordinary Least Square (OLS) method to estimate the parameters of the independent variables. The findings from the study revealed that long run relationship exists between trade liberalization and manufacturing value added. The study concluded and recommended that Nigeria government should adopt positive manufacturing and trade policies in which resources should be allocated to important sectors through persuasion by directing banks to offer credit to local manufacturing firms. Jakob and Georg (2015) examined "Effect of Export Promotion on Firm-Level Performance". The objective of the study was to answer two questions, i. Does export promotion improve performance of firms? ii. To what extent do benefits outweigh costs? The study used secondary data from 1999 to 2012. The study employed difference-in-difference (DID) estimator that relies on observable firm characteristics to identify the effect of export promotion activities on firms' performance. It was found that export promotion provided by Danish government significantly increase sales, valued added, employment and valued added per worker of Danish firms. The study concluded that the sum of the expenditures on export promotions, subsidies and tax distortions is roughly three times lower than the gain in the value added.



# **Critiques of the Reviewed Empirical Literature**

The topics of most of the empirical literature reviewed as stated above are appropriate and clear with easy identification of both the dependent and the independent variables of the studies. The scopes of the studies are also well stated while the general and specific objectives are clearly expressed in the introduction to the studies. Meanwhile, there are some of the reviewed studies in which the scope of the topic is not stated in their expressions. The scope of the topic is not appearing in the study of Shobande and Etukomeni (2016) titled "Infrastructural Investment and Industrial Growth: A Private Investment Led Approach", study of Jakob and Georg (2015) titled "Effect of Export Promotion on Firm-Level Performance", study of Guadagno (2016) titled "The Role of Industrial Development in Spurring Structural Change". The topic of the study is also too worded in the case of Edeme, Buzugbe, Nkalu and Arazu (2020) titled "Assessing the Impact of Infrastructural Development on Manufacturing Value Added and Employment in Africa Emerging Economies".

The abstracts of most of the studies reviewed do not capture the empirical tools of analysis used to arrive at their findings and conclusions. It was also observed that those studies whose findings are stated in the abstract, the conclusions and recommendations are not clearly expressed. There are also some of the studies out of the reviewed ones that conflict the methodologies adopted for the data analysis with what are stated in their abstracts. The study by Ogunlana, Yagub, and Alhassan (2016) titled "Infrastructure Finance and Development in Nigeria" states in its abstract that "The Engel-Granger (1987) Co-integration and Error Correction Mechanism were employed to analyse the unit root procedures. The main body of the study actually used Augmented Dikey Fuller (ADF) test to analyse the stationarity of the variables of study. Majority of the reviewed studies only addressed empirical literature as the reviewed literature and neglected the review of both the related concepts and theories.

# **Research Gap**

Most of the past researchers focus their researches on the effect of financing of development from commercial banks which usually give credits of short term maturity rather than development financial institutions that are specifically designated for financing of activities that are meant to improve economic growth and development by giving facilities of medium and long term maturity. The examples of this are, Itaman and Awopegba (2019), that assessed "The Role of Finance in Nigeria's Premature Deindustrialization", Itoya (2020) that examined "The Role of Financial Sector in Enhancing Performance in the Manufacturing Sector in Nigeria", Mai, Bui, Yuichiro, Tran and Mai (2019), that assessed "The Causal Effect of Access to Finance on Productivity of Small and Medium Enterprises in Vietnam" and Nwosa and Oseni (2013),



who looked into "The Impact of Banks Loan to SME's on Manufacturing Output in Nigeria". In all these empirical researches, the financing focus is the credit from commercial banks to private sector and not credits from development banks or financial institutions to private sector.

Another gap in the previous studies is that even for those researchers that looked at finance or credit from Development Financial Institutions (DFI's), they only focus on Infrastructural Finance only or SME's Development Finance only or Export Promotion Finance only. No researcher out of them has actually looked at the effects of all the channels of development financing together in a study in order ascertain the combined significance of all the channels of development financing together.

#### FINDINGS, CONCLUSION AND RECOMMENDATIONS

Having reviewed various empirical studies, this study found that there are various channels of financing national development and most of these channels exist in Nigeria through the national DFI's. Some of these channels of national development financing are infrastructure development finance, export promotion finance, Micro, Small, and Medium Enterprises (MSME's) development finance and other general finance of establishment and expansion of manufacturing businesses towards enhancing their growth and create incentives for manufacturing as a ladder of economic growth and development. Infrastructure development finance could be seen in the work of Lawrence (2020) in Kenya, Ogunlana etal (2016) in Nigeria, Shonbande and Etukomeni (2016) in Nigeria. Export promotion finance could be seen in the work of Jakob and Georg (2015) in Denmark, and Ebenyi etal (2017) in Nigeria. MSME's development finance could be seen in the work of Mutua and Ngahu (2016) in Kenya, Mai etal (2019) in Vietnam. General finance of establishment and expansion could be seen in the work of Itaman and Awopegba (2019) in Nigeria, Itoya (2020) in Nigeria, Guadagno (2016) for global analysis.

It was found that these finances for different channels of national development financing are better provided by development financial institutions because these specialized institutions offer finance or credit with longer maturity than commercial banks and their rate of interest is lower and affordable to the customers who are interested in development activities such as manufacturing, exportation etc. in order to improve the average capacity in any economy. Despite the opposing findings in few of the studies reviewed, it was also found that for majority of the empirical studies, the finance of all the above development channels mentioned above are significant in improving the growth of MSME's and even large scale businesses that engage in manufacturing and consequently significant on determining the average manufacturing capacity utilization/ manufacturing value added/ productivity as used as indicators to proxy



manufacturing firms' efficiency, manufacturing performance, manufacturing productivity in different studies.

Based on the findings above, this study concluded that national development financing of different channels of financing should be significant in improving the efficiency of manufacturing firms through investment in infrastructural development, promotion of exports, enhancing growth of MSME's in manufacturing, and provision of credit for establishment and expansion of viable manufacturing entities in Nigeria and other like economies. The study therefore recommended that governments of Nigeria and most affected under-developed countries, especially in Africa, should pay attention to enhancing the activities of their development financial institutions towards improving the average manufacturing capacity utilization, manufacturing value added and consequently the proportion of contribution of manufacturing to their Gross Domestic Product.

As an empirical review paper, the research examined the effect of national development financing on the efficiency of manufacturing firms in Nigeria by looking at the related past researches in Nigeria, Africa and some other regional views. The findings, conclusion and recommendations of the research were arrived at by examining the findings and conclusions of the past researchers whose works were reviewed. Further studies can be carried out by examining the effect of both national and international development financing on the efficiency of manufacturing firms in Nigeria. This will reveal the influence the international development financing through the international DFI's might also have on the efficiency of manufacturing firms in Nigeria. Not only that, further studies can also be carried out on the same topic by analyzing the empirical data collected with the appropriate statistical and econometric tools.

# REFERENCES

Ebenyi,G.O., Nwanosike, D.U., Uzoechina, B., & Ishiwu, V. (2017). The Impact of Trade Liberalization on Manufacturing Value Added in Nigeria. Saudi Journal of Business and Management Studies, 2(5A), 475-481.

Edeme, R. K., Buzugbe, N. P., Nkalu, N. C., & Arazu, W. O. (2020). Assessing the Impact of Infrastructural Development on Manufacturing Value Added and Employment in Africa Emerging Economies. Journal of Applied Economic Sciences, XV, Summer, 2(68), 366-376.

Guadagno, F. (2016). The Role of Development Banking in Spurring Structural Change. Department of Policy, Research and Statistics Working Paper 8/2016 of United Nations Industrial Development Organisation (UNIDO), 1-36.

Itaman, R.E. & Awopegba, O.E. (2019). The Role of Finance in Nigeria's Premature De-industralization. ESRC GPID Research Network Working Paper 20.

Itoya, J. (2020). The Role of Financial Sector in Enhancing Performance in the Manufacturing Sector in Nigeria. International Journal of Research in Education, Humanities and Commerce, 1(4), 13-29.

Jakob, R.M. & Georg, S. (2015). The Effect of Export Promotion on Firm-Level Performance.

Lawrence, K.L. (2020). Effect of Government Infrastructure Development Expenditure on Performance of Manufacturing in Kenya. M.Sc Thesis, Kenyatta University.



Mai, H.G., Bui, H.T, Yuichiro, Y., Tran, D.X. & Mai, T. Q. (2019). The Causal Effect of Access to Finance on Productivity of Small and Medium Enterprises in Vietnam. Sustainability 2019,11 (5451), 1-19.

Mutua, R.M. & Ngahu, S.T. (2016). Effect of Development Financing on the Growth of Micro, Small and Medium Enterprises Funded by Kenya Industrial Estates in Nakuru County, Kenya. International Journal of Economics, Commerce and Management, 4(9), 789-812.

Nwosa, P.I. & Oseni, I.O. (2013). The Impact of Banks Loan to SME's on Manufacturing Output in Nigeria. Journal of Social and Development Sciences, 4(5), 212-217.

Obianuju, O.N. & Isiaka, A.R. (2019). Infrastructure and Manufacturing Value Added in Sub-Sahara Africa Countries. Journal of Economic Literature, L6,O18, 1-26.

Ogunlana, O.T., Yagub, J.O., & Alhassan, B.T. (2016). Infrastructure Finance and Development in Nigeria. Arabian Journal of Business and Management Review, 3(12), 44-54.

Okere, P.A., Okere, C.O., & Nwaneto, U. (2020). Effects of Bank Credits on the Manufacturing Sector Output in Nigeria. International Journal of Science and Management Studies, 3(4), 74-82.

Omenyi, T.C. (2017). Industrial Capacity Utilization in Nigeria. Understanding Monetary Policies Series of Central Bank of Nigeria (CBN).

Satik, H. (2017). Capacity Utilization. Industrial Engineering Department, Dokuz Eylul University, Turkey.

Shobande, A.O. & Etukomeni, C.C. (2016). Infrastructural Investment and Industrial Growth: A Private Investment Led Approach. EJBE, 6(2), 159-183.

Signe, L. (2018). The Potential of Manufacturing and Industrialization in Africa trends, Opportunities, and Strategies, Africa growth initiative, https://www.brookings.edu/wp-content/uploads/2018/09/Manufacturing-and-Industrializationin-Africa-Signe-20180921.pdf.

Simon-Oke, O., & Awoyemi, O. (2010). Manufacturing Capacity Utilization and Industrial Development in Nigeria: An assessment (1976-2005). African Research Review, 4(2), 265-275.

World Bank. (2019). World development indicators. Retrieved from: https://www.worldbank.org.

